

Remarks

The Office Action dated March 8, 2005, has been received and carefully noted. The amendments made herein and the following remarks are submitted as a full and complete response thereto.

Claims 1, 3, 4, and 12-18 have been amended. New claims 19 and 20 have been added. Applicants submit that the new claims as well as the amendments made herein are fully supported in the specification and the drawings as originally filed, and therefore no new matter has been added. Accordingly, claims 1-20 are pending in the present application and are respectfully submitted for consideration.

Claims 1-4, 7, 8 and 10 Rejected under 35 U.S.C. §102

Claims 1-4, 7, 8 and 10 were rejected under 35 U.S.C. §102 as being anticipated by Shibata et al. (JP 2002-217676, hereinafter "Shibata"). Applicants respectfully traverse the rejection and submit that each of these claims recites subject matter that is neither disclosed nor suggested by the cited prior art.

Claims 1, 3 and 4 each recites a filter element comprising, among other features respective to each claim, a plurality of resonators that are arranged in series arms and parallel arms in a circuit and have a single piezoelectric thin film common to the plurality of resonators.

It is respectfully submitted that the prior art fails to disclose or suggest at least the above-mentioned features of the Applicants' invention.

In making the rejection, the Office Action characterized Shibata as allegedly disclosing "a ladder filter element comprising a plurality of resonators that are arranged in series arms (12 and 14) and parallel arms (16), at least one of the series arm

resonators at the first stage on the signal input side (18) including a plurality of signal-terminal pair piezoelectric thin film resonators (12a and 12b) connected in parallel.”

Applicants submit that Shibata fails to disclose or suggest each and every element recited in claims 1, 3 and 4 of the present application. In particular, it is submitted that the resonators (12a and 12b), for example, of Shibata are neither comparable nor analogous to the plurality of resonators that have a single piezoelectric thin film common to the plurality of resonators of the present invention. In fact, Applicants submit that Shibata merely discloses a resonator 12 consisting of resonators 12a and 12b stacked in the thickness direction (see paragraph 0031, for example). The double wave of the thickness longitudinal vibration or the thickness skid vibration is used, and therefore the resonators of Shibata are arranged at the knot of the vibration (see paragraph 0032, for example).

In contrast, the present invention as recited in claims 1, 3 and 4 provides a plurality of resonators that have a single piezoelectric thin film common to the plurality of resonators. Therefore, it is submitted that Shibata fails to disclose each and every element recited in claims 1, 3 and 4 of the present application.

Moreover, to qualify as prior art under 35 U.S.C. §102, a single prior art reference must teach, i.e., identically describe, each feature of a rejected claim. As explained above, Shibata fails to disclose or suggest each and every feature of claims 1, 3 and 4. Accordingly, Applicants respectfully submit that claims 1, 3 and 4 are not anticipated by Shibata. Therefore, Applicants respectfully submit that claims 1, 3 and 4 are allowable.

As claims 2, 7, 8 and 10 depend from claim 1, Applicants submit that each of these claims incorporates the patentable aspects therein, and are therefore allowable for at least the reasons set forth above with respect to the independent claims, as well as for the additional subject matter recited therein.

Accordingly, Applicants respectfully request withdrawal of the rejection.

Claims 12-18 Rejected under 35 U.S.C. §103

Claims 12-18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Shibata in view of Bradley et al. (U.S. Patent No. 6,262,637, hereinafter "Bradley"). Applicants respectfully traverse the rejection and submit that each of these claims recites subject matter that is neither disclosed nor suggested by the cited prior art.

Shibata is discussed above. Bradley is applied for teaching that "it would have been extremely well known in the art to provide thin film piezoelectric resonator filters in packages ... as the transmitting and receiving filters in duplexers utilizing a power amplifier in the transmitting branch and a low noise amplifier in the receiving branch."

Applicants submit that Bradley does not overcome the above-described drawbacks of Shibata.

To establish *prima facie* obviousness, each feature of a rejected claim must be taught or suggested by the applied art of record. See M.P.E.P. §2143.03 and In re Royka, 490 F.2d 981 (CCPA 1974). As explained above, Shibata in view of Bradley, do not teach or suggest each feature recited by pending Claims 12-18. Accordingly, for the above provided reasons, Applicants respectfully submit that pending Claims 12-18 are not rendered obvious under 35 U.S.C. § 103 by the teachings of Shibata and Bradley, and therefore claims 12-18 are allowed.

Under U.S. patent practice, the PTO has the burden under §103 to establish a *prima facie* case of obviousness. In re Fine, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Both the case law of the Federal Circuit and the PTO itself have made clear that where a modification must be made to the prior art to reject or invalidate a claim under §103, there must be a showing of proper motivation to do so. The mere fact that a prior art reference could arguably be modified to meet the claim is insufficient to establish obviousness. The PTO can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. Id. In order to establish obviousness, there must be a suggestion or motivation in the reference to do so. See also In re Gordon, 221 USPQ 1125, 1127 (Fed. Cir. 1984) (prior art could not be turned upside down without motivation to do so); In re Rouffet, 149 F.3d 1350 (Fed. Cir. 1998); In re Dembiczak, 175 F.3d 994 (Fed. Cir. 1999); In re Lee, 277 F.3d 1338 (Fed. Cir. 2002). The Office Action restates the advantages of the present invention to justify the combination of references. There is, however, nothing in the applied references to evidence the desirability of these advantages in the disclosed structure.

Applicants respectfully request withdrawal of the rejection.

Claim 5, 6, 9 and 11 Rejected under 35 U.S.C. §103

Claim 11 was rejected under 35 U.S.C. §103(a) as being unpatentable over Shibata in view of Tikka et al. (U.S. Patent No. 6,407,649, hereinafter "Tikka '649"). Furthermore, claim 9 was rejected under 35 U.S.C. §103(a) as being unpatentable over Shibata in view of Tikka et al. (U.S. Patent No. 6,741,145, hereinafter "Tikka '145").

Claims 5 and 6 were also rejected under 35 U.S.C. §103(a) as being unpatentable over Shibata in view of Satoh et al. (U.S. Patent No. 5,631,612, hereinafter "Satoh").

Applicants respectfully traverse the rejection and submit that each of these claims recites subject matter that is neither disclosed nor suggested by the cited prior art.

As claims 5, 6, 9 and 11 depend from claim 1, Applicants submit that each of these claims incorporates the patentable aspects therein, and are therefore allowable for at least the reasons set forth above with respect to the independent claims, as well as for the additional subject matter recited therein.

Accordingly, Applicants respectfully request withdrawal of the rejections.

New Claims 19 and 20

New Claims 19 and 20 have been added. Applicants submit that each of new claims 19 and 20 recites subject matter that is neither disclosed nor suggested by the cited prior art, and therefore is allowable.

Conclusion

In view of the above, Applicants respectfully submit that each of claims 1-20 recites subject matter that is neither disclosed nor suggested in the cited prior art. Applicants also submit that the subject matter is more than sufficient to render the claims non-obvious to a person of ordinary skill in the art, and therefore respectfully request that claims 1-20 be found allowable and that this application be passed to issue.

If for any reason, the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact the

Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper has not been timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300.

Respectfully submitted,



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